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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/757,856	(	01/11/2001	Dale C. Flanders	1028-CO 8212		
25263	7590	01/16/2002				
	J GRANT HOUSTON				EXAMINER	
AXSUN TEG	DRIVE		•	JEFFERY, JOHN A		
BILLERICA	, MA 01	821		ART UNIT	PAPER NUMBER	
				3742		
				DATE MAILED: 01/16/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Flanders et al	<b>/</b>
Office Action Summary	Examiner Jeffer	Group Art Unit 3742	
—The MAILING DATE of this communication appe	ars on the cover sheet be	eneath the correspondence ac	idress
eriod for Reply	7		
SHORTENED STATUTORY PERIOD FOR REPLY IS SET	TO EXPIRE	MONTH(S) FROM THE MAII	ING DATE
<ul> <li>Extensions of time may be available under the provisions of 37 CFR from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a</li> <li>If NO period for reply is specified above, such period shall, by defau</li> <li>Failure to reply within the set or extended period for reply will, by sta</li> </ul>	reply within the statutory minimult, expire SIX (6) MONTHS from	um of thirty (30) days will be considere the mailing date of this communication	ed timely.
tatus			
☐ Responsive to communication(s) filed on		,	· · · ·
☐ This action is FINAL.		•	ı
☐ Since this application is in condition for allowance except accordance with the practice under <i>Ex parte Quayle</i> , 19			sed in
isposition of Claims			
Claim(s) /- /5		is/are pending in the app	lication.
Of the above claim(s)		is/are withdrawn from co	nsideration.
□ O(a)m/a)	•	in/ore elleured	
Claim(s) /-/5		is/are rejected.	
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pplication Papers		roquiomoni.	•
☐ See the attached Notice of Draftsperson's Patent Drawi	ng Review, PTO-948.		
☐ The proposed drawing correction, filed on	is 🗆 approved [	□ disapproved.	
☐ The drawing(s) filed on ls/are objection	cted to by the Examiner.		
☐ The specification is objected to by the Examiner.		•	
☐ The oath or declaration is objected to by the Examiner.		·	
riority under 35 U.S.C. § 119 (a)-(d)			
<ul> <li>□ Acknowledgment is made of a claim for foreign priority to</li> <li>□ All □ Some* □ None of the CERTIFIED copies o</li> <li>□ received.</li> <li>□ received in Application No. (Series Code/Serial Numl</li> <li>□ received in this national stage application from the In</li> </ul>	f the priority documents ha	ve been	•
*Certified copies not received:			
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ttachment(s)			
☐ Information Disclosure Statement(s), PTO-1449, Paper		•	
☐ Information Disclosure Statement(s), PTO-1449, Paper  Notice of Reference(s) Cited, PTO-892  Disclosure Statement(s), PTO-992  Disclosure Statement(s), PTO-992		terview Summary, PTO-413 otice of Informal Patent Applicat	•

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

Serial Number: 09/757856

Art Unit: 3742

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-5, 7-11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Honmou (US5563969) or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Honmou (US5563969). Honmou (US5563969) discloses a method and apparatus for fusing an optical fiber lens including injecting light into the fiber via laser 5, detecting the far-field image pattern via detector 6 mounted about 10 cm from the end surface of the fiber (col. 3, line 53), and using the recognized image as a control signal to control the discharge of electrodes for fiber electrofusion using control system 2. See Fig. 3 and entire document. While the reference is silent as to the far-field pattern being a diffraction pattern, in view of (1) the detector's image recognition capability and ability to produce a picture signal (col. 3, lines 54-58), and (2) the nature and characteristics of the far-field pattern detected resulting from light exiting the fiber end, the detector 6 inherently detects the diffraction pattern. If such inherency is disputed, then the detection of a diffraction pattern from the far-field image detected by detector 6 would have been obvious to one of ordinary skill in the art in view of the nature and characteristics of the image of the far-field pattern detected resulting from light exiting the fiber end.

Claims 6, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honmou (US5563969) in view of Fanning (US47583886). The claims differ from the previously cited prior art in calling for the controller

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to activate the arc fuser in a pulsed fashion. Controlling an arc fuser in a fiber lens producing apparatus is conventional and well known in the art as evidenced by Fanning (US47583886) noting Col. 1, lines 12-15 wherein Fanning (US47583886) teaches that, in a lens-making process, the arc can be more closely controlled by repeatedly turning it on and off. In view of Fanning (US47583886), it would have been obvious to one of ordinary skill in the art to activate the arc fuser in a pulsed fashion in the previously described apparatus so that the arc can be more closely controlled by repeatedly turning it on and off. The claims also differ from the previously cited prior art in calling for the controller to determine a ratio of lateral size to a transverse size of the diffraction pattern. Honmou (US5563969) in Col. 3, line 54 - Col. 4, line 23 teaches using the far-field pattern diameter as the parameter to compare to a preset value for control purposes. In view of Honmou's use of a size parameter of the pattern for control purposes, no criticality is seen in the use of a ratio of sizes as claimed in claims 6 and 14. Selecting either the size value of the diameter of the pattern or a ratio of size values of the pattern is mere engineering design preference within the level of one of ordinary skill in the art. Furthermore, it is well settled that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 454, 456, 105 USPQ 233,235 (CCPA 1955). Here, the use of a ratio in lieu of a single diameter value would constitute the discovery of the optimum pattern size values for electro-fusion control purposes; such a discovery would be obtainable via routine experimentation.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-15 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-15 of copending Application No. 09/740,430. This is a <u>provisional</u> double patenting rejection since the conflicting claims have not in fact been patented.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited prior art when responding to this action.

US 968, US 482, US 776, JP 864, US 395, JP 663, US 195 disclose optical fiber systems relevant to the instant invention.

Any inquiry concerning this or earlier communications from the examiner should be directed to John A. Jeffery at telephone number (703) 306-4601 or fax (703) 305-3463. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM EST. The examiner can also be reached on alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.

JOHN A. JEFFERY PRIMARY EXAMINER

1/15/02

# Attachment for PTO-948 (Rev. 03/01, or earlier) 6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

#### INFORMATION ON HOW TO EFFECT DRAWING CHANGES

#### 1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1 136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

# 2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made other than correction of informalities, unless the examiner has approved the proposed changes

### Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a)

Failure to take corrective action within the set period will result in ABANDONMENT of the application.